QTM-EAP10

Power-over-Ethernet
Quantum RTLS anchor node

ZERØKEY
SPATIAL INTELLIGENCE

QTM-EAP10 is a Power-over-Ethernet device which functions as an anchor node in permanent Quantum RTLS networks. Daisy-chainable with universal mounting support, the QTM-EAP10 allows for rapid deployment of a Quantum RTLS system with minimal downtime in any environment.

Daisy-chainable Topology
Each unit is equipped with a Fast Ethernet switch and PoE+ capabilities to allow device-to-device daisy-chains without intermediary power injectors for chains of up to 12 devices.

Adjustable Receiver Design
To optimize signal reception, a manually adjustable ball-joint allows users to direct the device's field of view to maximize coverage and performance.

Gateway-less Design
QTM-EAP10 acts as a gateway, relaying data to and from its Ethernet interface and the Quantum RTLS wireless network, eliminating the need for a standalone gateway device.

Versatile Architecture
Networks are easily configured and reconfigured using ZeroKey's Spatial Intelligence Platform as more devices are added to the system.

Supports Any Use Case
The QTM-EAP10 offers a flexible geometric configuration to support any use case; from wide-area tracking of an entire facility to complex production workflows and everything in between.

Rugged Industrial Design
The device is built with high-grade materials intended for use in demanding industrial environments.

Key Features

- Interoperable with all Quantum RTLS devices
- Supports up to 20m range per anchor
- Automated network calibration
- Power-over-Ethernet 802.3at (PoE+)
- DC power injection port
- Daisy-chainable connectivity
- Rapid deployment with universal mount options
- Adjustable emitter/receiver ensures maximum coverage
- Low-latency communication
- Support for auxiliary external receiver (sold separately)
- 32-bit ARM Cortex-M4 @ 64MHz

Flexible Geometry, Any Use Case

Flexible geometric configuration is supported allowing you to cover any use case; from wide area asset tracking of an entire facility, to complex production workflows and everything in-between.
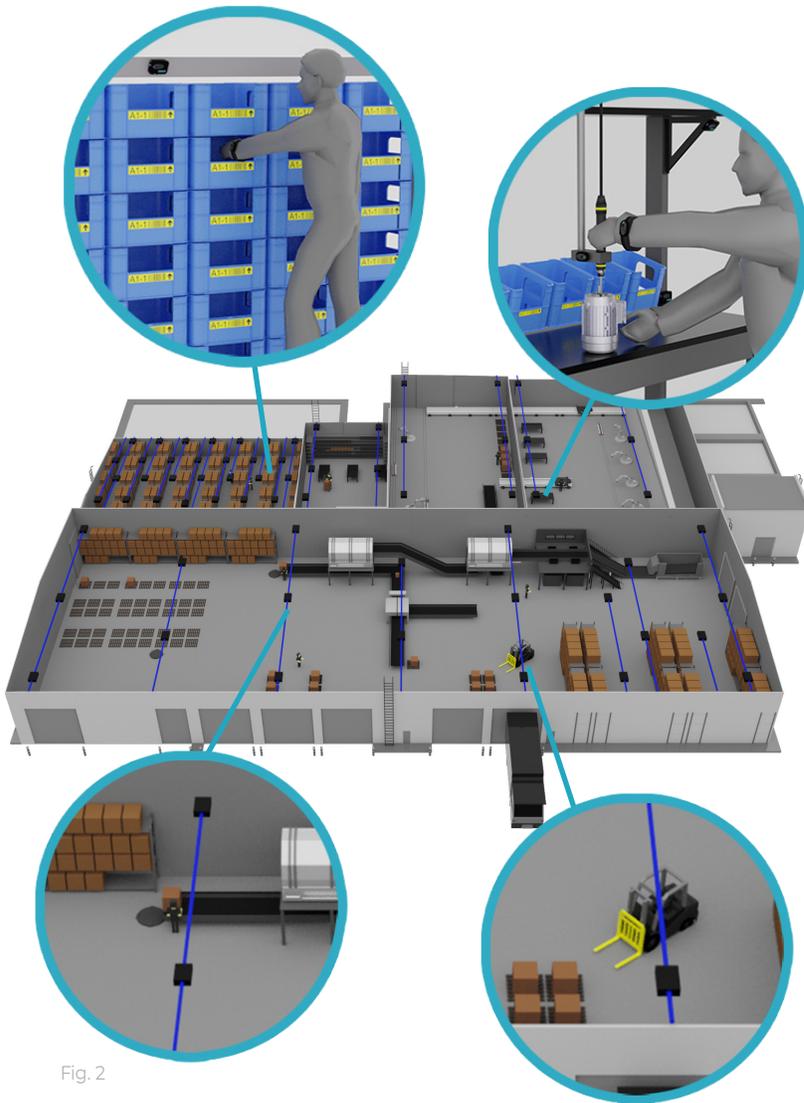

Fig. 2

Dimensions (LxWxH)	119 x 65.9 x 31.5
Weight	106 g
Input Voltage	50.0-57.0v DC
Input Current	50 mA max
Output Voltage	44-57v DC
Quiescent Current	0.25 to 0.50 mA
Power-over-Ethernet	802.3at type 2 "PoE+"
Ethernet Speed	10/100 Mbps
Microcontroller	ARM Cortex-M4F @ 64MHz
Ethernet Port	2 x RJ45
USB	USB 2.0 (12Mbs)
DC Power Connector	2.10mm ID 5.5mm OD, centre positive.
Peripherals	Status LED, temperature sensor
Mounting Options	Universal Mounting Plate, 2 sided tape
Operating Temperature	-20 to 60°C
Operating Humidity	5 to 95% Non-Condensing
RF Modulation	GFSK
RF TX Power	0-8 dBm
RF RX Sensitivity	-90 to -97 dBm
Ultrasonic Frequency Band	50.0KHz +/- 0.1KHz
Ultrasonic Output	96 dB SPL (max)
Ultrasonic Duty Cycle	2.8% (min) 3.2% (max)
Certifications	FCC (US) / IC (Can) / CE (EU) / VCCI (JP) / K (KR)

† Pat. US 9/977,113, US 10/051,599, US 10/448,357, US 10/627,479, US 10/736,075, US 10/893,502, CN109073740B, KR102252251B1, US 15/339,885, US 15/982,750, US 16/031,553, US 16/560,543, US 16/820,445, US 16/919,822.

See https://zerokey.com/patents for a complete list of patents applicable to this product.

1. For a single device only
v. 122022   *Information Subject to Change

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